

# KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY

## March 2022 SUMMARY

### Rasa Island Wildlife Sanctuary and its environs, Narra, Palawan



20

Bilang ng nagawang  
patrolya



0

Bilang ng illegal na  
kailangang aksyunan



180

Kabuuang kilometrong naabot  
ng patrolya



0

Bilang ng mga issues na  
nai-report sa PAMO



45

Kabuuang oras ng  
patrolya



0

Bilang ng naaresto



148

Pinakamataas na bilang sa  
tulugan ng Katala



37

Bilang ng ibang uri ng  
ibon na nakita



38

Pinakamataas na bilang  
ng Katala sa kinakainan



13

Uri ng halamang namumunga



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## April 2022 SUMMARY

### Rasa Island Wildlife Sanctuary and its environs, Narra, Palawan



28

Bilang ng nagawang  
patrolya



0

Bilang ng illegal na  
kailangang aksyunan



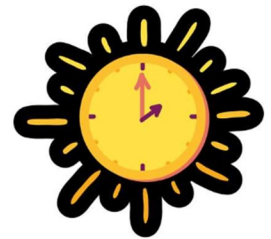
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Kabuuang kilometrong naabot  
ng patrolya



0

Bilang ng mga issues na  
nai-report sa PAMO



60

Kabuuang oras ng  
patrolya



0

Bilang ng naaresto



151

Pinakamataas na bilang sa  
tulugan ng Katala



35

Bilang ng ibang uri ng  
ibon na nakita



91

Pinakamataas na bilang  
ng Katala sa kinakainan



12

Uri ng halamang namumunga



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## KFI PATROL AND MONITORING REPORT ON FOREST AND BIODIVERSITY RASA ISLAND WILDLIFE SANCTUARY

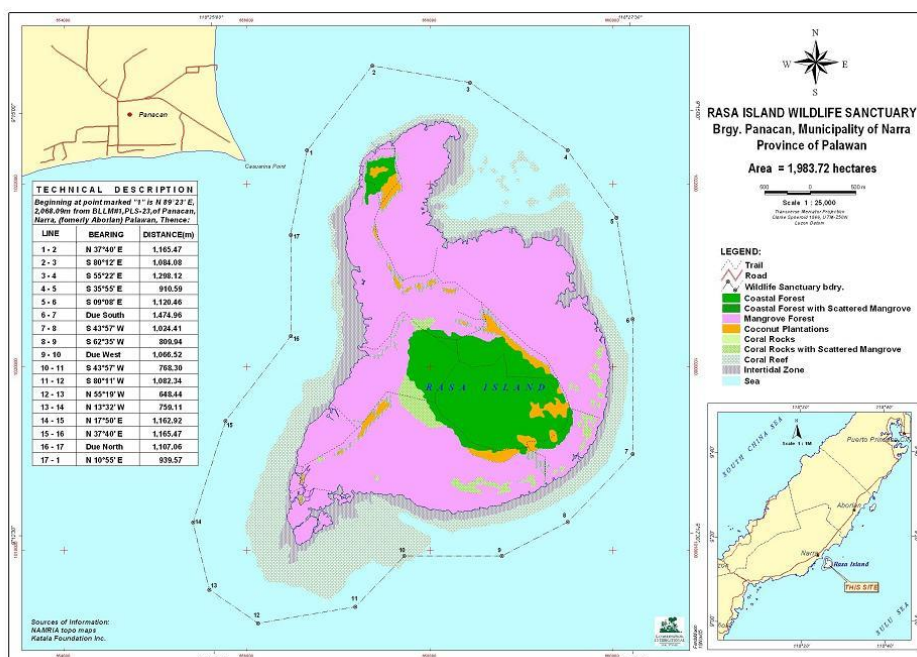
**MARCH-APRIL 2022**

Prepared by:

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### I. GENERAL DESCRIPTION OF THE CONSERVATION AREA, CONSERVATION OBJECTIVES, CONSERVATION TARGETS AND METHODS

Rasa is a small coral island of 8.34 km<sup>2</sup> land area situated in the Sulu Sea, just offshore of the Municipality of Narra, Palawan, Philippines (Fig. 1). About 1.75 km<sup>2</sup> are covered with coastal forest, mangrove (5.60 km<sup>2</sup>), cultivated areas (predominantly coconut; 0.39 km<sup>2</sup>), 0.60 km<sup>2</sup> are barren or sparsely vegetated sand and coral outcrops. In February 2006, the island became a Wildlife Sanctuary through Presidential Proclamation 1000 and since a Protected Area Management Board manages the Rasa Island Wildlife Sanctuary (RIWS). In 2008, RIWS was chosen as Top 13 Bird Watching Sites in the Philippines by the Department of Tourism.



**Figure 1.** Landuse map of Rasa Island Wildlife Sanctuary in Narra, Palawan, Philippines

The island is the pilot site of the Philippine Cockatoo Conservation Program since 1998. Due to intensive poaching, only 23-25 Philippine cockatoos were left on the island then. Key component of this project site is the warden scheme which involves ex-poachers as wildlife wardens whose main task is to patrol and protect the wildlife in particular the Philippine Cockatoo during and outside its breeding season. This scheme has proven to be efficient and lead to the dramatic recovery of the Philippine Cockatoo population to nearly 400 individuals as of to date. This makes RIWS the most important population of the species in the wild!

Not only Philippine Cockatoos live on the island, but a variety of other species, with an unusual high percentage of globally threatened and near-threatened taxa (IUCN 2019), considering the small size of Rasa. Noteworthy among the 112 recorded bird species are Red-headed Flameback *Chrysocolaptes erythrocephalus* (EN), Grey Imperial-pigeon *Ducula pickeringii* (VU) and Mantanani Scops-owl *Otus mantananensis* (NT).

### Conservation Objectives

1. Maintain the species diversity and function of ecosystems and species within Rasa Island Wildlife Sanctuary.
2. Identify and preserve priority sites for conservation and maintain their ecological functions.
3. Prevent or report to enforcing agencies illegal activities that compromise the integrity of the conservation area.

### Conservation Targets

1. To stabilize number of Philippine Cockatoo breeding pairs on Rasa Island and vicinity by 2024 (Baseline: average breeding pairs from 2019 to 2021: 33.0).
2. Conduct weekly patrol and permanent presence of wildlife wardens with daily reports during breeding season per year.
3. Conduct at least 12 school/community visits (with at least 20 percentage point increase in KAPP survey results for individual interventions) and one festival annually.
4. Rehabilitate at least one hectare per year through reforestation or enrichment planting within cockatoo foraging area.
5. Monitor and reduce threats in the area by 50% from 2022-2024; if any.

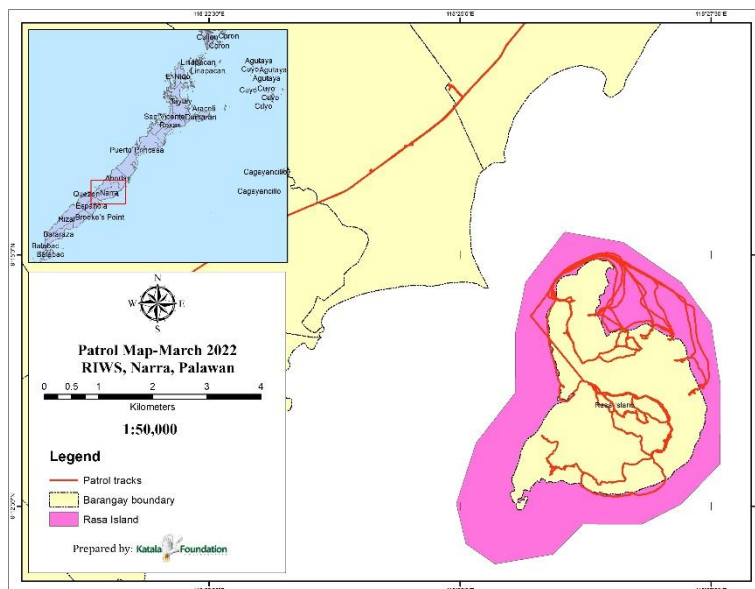
### Methods

Deputised wardens patrol by foot or by boat monthly within site. Patrol members use a technology-based system to register all observations (threats, status and wildlife data) in the android and transferred to a smart application to generate report (Critchlow et al., 2017; Teacher et al., 2013). Species to be monitored are based on their red-list status and their value as bioindicators (IUCN, 2019). Ease of identification in the field was considered as well. The maps are generated and analyzed through QGIS/ArcGIS. Patrols are coordinated with the concerned barangay and protected area office wherever it applies.

## II. PATROL TEAM AND EFFORT

The patrol and monitoring team members are our wildlife wardens and mainland volunteers: **REYNALDO ALBELAR, LORETO ALISTO, BERNITO BASIO, EDWIN BATAAC, MARIO BATAAC, LUCITO DANGIS,** Veronica

Marcelo, Danilo Villaruz, Monico Beleg and Antonio Marcelo. Three teams of wardens covered **180 and 109kms for March and April** respectively of nest checking and wildlife monitoring around Rasa. Total of precipitation in March 2022: **263mm** on Rasa, **405mm** on mainland while in April 2022: **151mm** on Rasa, **241.5mm** on mainland.



**Figure 2.** Patrol tracks in red marks in March 2022



In March, all active nests were visited including two potential nest trees. On Mar. 7, Reynaldo and Lucito noted one cockatoo on nest hole of dead Gindaon then went outside. The Gatasan exhibits more signs of occupation. The first cockatoo eggs on Rasa were recorded this month. As of March 26, we recorded 55 eggs from 30 occupied nest trees. Seven camera traps were randomly installed around Rasa. Data loggers were also checked regularly. On Mar. 9, Lucito saw cockatoo feathers on ground around a nest. He suspected it was attacked and dragged somewhere by an osprey.



**Figure 3.** Mario and Bernito monitor cockatoo nest trees on Rasa (top photos). Mark and Mario check on status of eggs and hatchlings through wifi-enabled endoscope (lower left) while Bernito puts the cable wire with lens inside the nest hole (lower right) ©KFI

In April, from two-day interval of nest checking, the teams shift to one-day interval especially now that rain is getting more frequent. Mites were observed on hatchlings on one nest on southeast Rasa. Though infestation was not severe, we treated it with cock shampoo immediately. The hatchlings with treated mites were checked the day after and exhibited no mites and was good health status. Mites were collected as well as the substrates of nest trees with hatchlings for further studies. Due to deep nest chambers on Rasa, an endoscope is used for detection of eggs and hatchlings.

### III. PATROL OBSERVATIONS

#### A. WILDLIFE OBSERVATIONS

First cockatoo eggs on Rasa were noted in Mar. 7. The highest count of cockatoo around nest trees particularly on coastal forest were recorded with six individuals. Sub-adult cockatoos were also observed with adult ones. 75 nest trees and Gatasan nest tree were visited in April 2022.

Out of these, 36 nest trees were occupied (incl Gatasan). Gatasan nest tree in coastal area is occupied with one egg on Apr. 1 though it failed. The egg was retrieved on Apr. 29. As of April 29, we recorded a total of 66 eggs on Rasa where 30 of which hatched. 17 eggs and 2 hatchlings were unsuccessful this month. 19 remaining eggs are still being monitored. Eggs are still expected on next checking schedules. Seven individuals were the highest count around nest trees during our scheduled visits and monitoring.

**148 and 151 individuals** were the highest counts at the traditional roost site for March and April respectively. In both months cockatoos were observed sleeping in the vicinity of the nest trees. On the other hand, no roosting cockatoos was recorded at Borbon during synchronized counting. Veronica counted **38 individuals** at Borbon on Mar. 17, flying to mainland at 6:25-8:40pm to forage. In one of our time counts in Mar. 3, six individuals were observed crossing to mainland from 6-10:00am. In the same month last year, less cockatoos were also observed crossing to forage. On Mar. 11, Peter saw five individuals crossing Malatgao bridge at 4:28pm. Veronica counted **91 individuals** flying back to Rasa from 7:22-8:35am on Apr. 29. Likewise, the highest count at Marcelo area was also noted in the same date with 24ind. Cockatoos were observed foraging on Katala lot beside Marcelo's residence and around her stations. During our timed count on Apr. 26, 55ind crossed from Rasa to mainland (due Borbon and Antipuluan) from 5:59-8:40am while 38ind flew back to Rasa from 7:10-8:30am. Less cockatoos were still observed crossing in the afternoon. On Apr. 18, 3ind could not go back to Rasa due to strong wind at 6:15pm. It stayed on coconut trees at Borbon instead. Earliest cockatoos' flight to mainland was at 5:51am while the latest flight to Rasa was 6:15pm recorded at Borbon station

This month, rain was more frequent than in previous months. 19inds were the highest count foraging on Marcelo area in Mar. 17 while no individual visited or foraged in the same area last year. This month, abundant food was observed on Rasa. Earliest cockatoos' flight to mainland was at 6:20am while the latest flight to Rasa was 6:22pm recorded at Borbon station.



**Figure 4.** Cockatoos forage on Malunggay at Malinao, Narra on Mar. 4 (left) and Mar. 23 (right)

Beside the Philippine Cockatoo other recorded species this month were Nicobar Pigeon, Blue-headed Racquet-tail (BHRT), Red-headed Flameback, Tabon Scrubfowl, Palawan Flowerpecker/ Tit, Green Imperial-Pigeon, White-bellied Sea-eagle, Egret sp., Pied Imperial-Pigeon, Common Koel, Great-billed Heron, Common Tern, Western Osprey, Dollarbird, Blue-Paradise Flycatcher/ Black-naped Monarch, Zebra Dove, Asian Glossy Starling, White-collared Kingfisher, Greater Coucal, Sunbird sp., Large-tailed Night-jar, Rufous-tailed Tailor-bird, Pipit, Ashy Drongo, Emerald Dove, Reef Egret, Oriental Dwarf-kingfisher, Whimbrel, Rufous Night-heron, Stork-billed Kingfisher, White-vented Shama, Fruit-dove sp., Changeable Hawk-eagle, Mantanani Scops-owl, and Spotted Wood-owl. Monitor Lizard is frequently encountered on Rasa. Blue-naped Parrot was seen and once seen with four BHRT feeding on Mala-kalamansi near camp then flew due mangroves. On Mar. 24, Lucito observed it perching on nest tree then



flew to Asinan area. Bernito heard Spotted Wood-owl squabbling near camp site. Mantanani Scops-owl was noted on Mar. 24 at Mario's area. On Mar. 8, 30ind of Pied Imperial-pigeon flew from Asinan to coastal forest. Bernito noted Large-tailed Night-jar with two eggs at R. Deig area on Mar. 27 (Fig. 5). Lucito noted two small bats came out from nest tree near camp on Mar. 25 while climbing on nest. On Apr. 3, Sikopsikop, a predator of smaller birds perched on branch of nest 54 then flew due nest 26. Reynaldo saw snake near campsite on Apr. 17



**Figure 5.** Two eggs of Large-tailed Night-jar noted Mar. 27 at 8:46am (left) and it was with parent at 10:27am (right)

### **Vegetation assessment**

Greener vegetation is observed in March and April 2022 both on boundary and inner coastal forest of Rasa. Leaf litter is less dense. Fruiting trees and vines were Taluto, Ginlaid, Tulangpagi, Mala-kalamansi, Balete, Kasuy-kasoy, Gatasan, Balindadagat, Binunga, Dapdap, Bagalunga, Aring, Piagaw, *Rhizophora* sp. and other mangrove species. Likewise, flowering trees and vines were Taluto, Bogo, Dapdap, Aring, Pagatpat, *Rhizophora* sp. and other mangrove species.



**Figure 6.** Flowering Pagatpat *Sonneratia alba* (top left), flowering Bogo *Garuga floribunda* (top right) and fruiting Mala-kalamansi (bottom) on Rasa in March 2022



## B. THREAT OBSERVATION

No adverse human activities observed on Rasa during monitoring.

On Mar. 21, we visited the reported suspected dead cockatoo at Panacan and verified that it was not cockatoo based on its small (undersized even for cockatoo down feathers), white feathers (Fig. 4). We interviewed the community in barangay including Danny Villaruz's wife.



**Figure 7.** Visit on alleged dead cockatoo and verification on witnesses at Panacan, Narra; Small feathers are observed around the area ©KFI

## III. OTHER HIGHLIGHTS

Prior informed consents for the project Nature-based solutions for Tuas Watershed (Taritien River) in Narra, Palawan were secured after conducting presentations to Barangay councils of Poblacion, Antipuluan, Taritien and Elvita (Fig. 9). Mr. Jonas Arcilla, a geologist and professor from Palawan State University (PSU)-PPC together with MENRO Mr. Neil Varcas conducted ocular visit at Bgy. Taritien and Elvita on Apr. 9 as part of the said project.

**Figure 8.** Ocular visit with Mr. Arcilla and MENRO on Bgy. Taritien and Elvita at the foothills of mountain (left); Estuary at Bgy. Taritien was also visited (right) @KFI



Camera based-trapping in lowland forests within these target barangays was conducted in March to April. Focus group discussion and meetings with farmers were also organized (Fig. 9). We talked with a total of 72 farmers in nine sessions. Some of the participants were members of local vegetable growers and corn cluster groups, irrigators' association and employee of National Irrigation Administration (NIA). The meetings aimed to determine the essential support for the farmers to work both for conservation and for their increased income.

The challenges they encounter are high cost of farm inputs (e.g., expensive fertilizer, pesticides, insecticide, herbicides and diesel, labor cost, seed variety and quality, poor soil quality, post-



harvest facility, farm-to-market road, transportation and rice processing cost), low price of palay, lack of capital, pathogens, irrigation system, lack of government support, feeling of farming is not prioritized, flood, birds (e.g., maya and pigeons), and weather. Majority of the farmers in barangay Antipuluan, Poblacion, Elvita and Taritien engage in inorganic farming for rice, vegetable and corn production. Majority of the participants sell unprocessed inorganic rice (palay) to traders. Traders then process and package rice while giving only the net amount to farmers. The farmers' necessary trainings and supports are determined eventually after identifying benefits and barriers of organic farming with the participants. Majority of the participants consider organic farming though they perceive that they lack knowledge and experience.



**Figure 9.** Presentation on Nature-based solutions for Tuas watershed to Barangay Taritien council (left); FGD on perception of farmers on organic farming with Narra Organic Farmers' Association (right)

*Monitoring on coconut plantations on Rasa.* On Mar. 4, three persons gathered 300kgs of copra at Deig area for one week. On Mar. 6, six persons collected 1200kgs copra on Rasa in one week. On Mar. 10, three persons gathered 200kgs copra on Rasa in two days. On Mar. 26, two persons collected 350kgs of copra at Baltazar area for 10 days. On Apr. 1, two persons gathered 70kgs of copra at Deig area for three days while on Apr. 2 Edwin's brother was at his area gathering copra.

A microscope (right photo) was donated to the PCCP-KIEBC through UPLB College of Veterinary Medicine under Dr. Emilia Lastica to support its objectives especially on management of captive animals in Katala Institute at Bgy. Antipuluan, Narra.

Wardens work on extending roof of campsite (Fig. 10) and additional wood platform for herbarium specimen.

KFI wildlife wardens, volunteers and staff were trained on savings and creation of Katala savings club on Mar. 11 by Mr. Art Faburada, RARE personnel (Fig. 10).







**Figure 10.** Edwin paints GI for camp roof extension (left); Mr. Faburada discusses the benefits on joining the savings club (right)

A fiberglass boat of KFI with special funds from ZGAP is fabricated with the assistance of Mr. Antonio Gamad, Municipal Agriculturist of Narra (Fig. 11). This first fiberglass boat created by Narranons will help in promoting eco-friendly boat through conversion from wood-made hull to fiberglass hull of boats in the municipality. Lucito assisted on fabrication of outrigger of fiberglass boat.



**Figure 11.** Mold for fabrication of fiberglass boat (left); Mr. Gamad shows how floaters (styrofoam inside pet bottles) are piled in the boat that helps on achieving buoyancy of the boat (right)

In March, International Women's Day was commemorated through PCCP Fb page. Active women in wildlife conservation in Narra, Palawan who include fisherfolks, KFI-PCCP volunteers and staff expressed their valuable contributions in the subject.

### Visitors

On Mar. 31, Mr. George Tapan, a well-known photographer visited cockatoo roosting site to take footage for a coffee-table book that includes details on cockatoos and Rasa Island. On Apr. 1, a team headed by Ms. Jazz Ong interviewed Dr. Sabine Schoppe to help promote awareness on Philippine Freshwater Turtle species and other projects under KFI. On Apr. 8, Lutz Geissler and company visited Katala Institute (KI) at Bgy. Antipuluan, Narra.



#### IV. ISSUES, CONSTRAINTS AND ACTIONS TAKEN

Owners of lobster traps at Borbon, Panacan must be informed to not encroach inside Rasa boundary. Prescriptions for each zonation must be finalized and disseminated by PAO and with other PAMB members to encourage more active role in protection. Case filed against establishment of fish corral on Rasa must progress. Collection of fossilized Taklobo shells has been rampant even in other municipalities of Palawan hence intensive monitoring around Rasa at night is also encouraged.

#### V. ACKNOWLEDGEMENT

The PCCP acknowledges the key players on the ground: our wildlife wardens and mainland volunteers: REYNALDO ALBELAR, LORETO ALISTO, BERNITO BASIO, EDWIN BATAAC, MARIO BATAAC, LUCITO DANGIS, Veronica Marcelo, Danilo Villaruz, Monico Beleg and Antonio Marcelo.

Thank you very much to the LGU-Narra through Mayor Danao and staff, Vice Mayor Lumba, and the municipal council, department heads, barangay officials, and everyone in the LGU for their unrelenting support and appropriation per year for our wardens and volunteers. Also, we thank the Narra community for pursuing the cause of cockatoo conservation in Narra. We also thank the PAMO through former PASu Pablo Cruz for his leadership and for PASu Ma. Teresa V. Ayson for her kind attention.

We are grateful to KFI family and board members for their help, assistance and sharing expertise and ideas.

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